

abundant. Beautiful country scenery, as well as masterpieces of architecture and art of other kinds in the precinct, would attract his attention, awaken his interest, and tend to prevent him dwelling too much in thought on his own ailments. There can be little doubt that the sick were in general much benefited by their residence at the Asklepieia of ancient Greece.

THE SNOW-PEAKS OF RUWENZORI.

THE paper read by the Duke of the Abruzzi at the special meeting of the Royal Geographical Society on January 12, of which a short report was given in NATURE for January 17 (p. 282), has been printed in full

The paper as printed supplies information as to the basis for the determination of the heights of the snow-peaks, fourteen of which were climbed by the Duke. With one exception, they all depend on observations with the mercurial barometer referred to Bujongolo as a lower station, which again was linked with Fort Portal, and through this with Entebbe, by barometer readings as nearly simultaneous as possible. Some of the heights above Bujongolo were also fixed by Captain Cagni by vertical angles, the results agreeing closely with those of the barometer observations. The Duke's figures are mostly about 100 feet to 200 feet in excess of those derived from Captain Behrens's triangulation, and it is possible that when the altitude of Fort Portal above the Victoria lake has been

MOUNT STANLEY
Queen Margherita Peak
Queen Alexandra Peak

King Edward Peak

MOUNT BAKER
Grauer Rock Wolaston Peak



The Highest Peaks of Ruwenzori.

Moore Glacier

in the February number of the *Geographical Journal*, accompanied by a small selection of Signor Sella's striking photographs. One of these, showing the highest summits of the range, we are enabled to reproduce herewith by the courtesy of the editor of that journal. The twin peaks in the background on the left are the culminating points of the whole range, named by the Duke after the queens of Italy and England. They belong to the group of peaks named by him Mount Stanley, while the remaining summits shown in the photograph form together the group to which the name Mount Baker is applied, the highest point of which is King Edward Peak (the most central in the picture). As is well shown, the two *massifs* (like the whole six which constitute the snowy portion of the range) are separated by a comparatively deep depression, to which the name Scott Elliot Pass has been given by the Duke.

fixed trigonometrically, a small correction will have to be applied throughout. The general accordance in the heights of the six separate *massifs* is somewhat striking, none falling below 15,000 feet, while the highest point of all is only 16,816 feet. None of the peaks offers any serious difficulties to the climber, for the Duke says that the obstacles met with during the ascent of the Queen Margherita peak could have been avoided by another route.

The Duke's conclusions as to the geological history of the range were summarised in our former article, but it may be added here that attention is directed to the probable existence of internal fractures traversing the whole range in a generally north-south direction, which would account for the separation of the several groups of summits. The general hydrographic system can be grasped from the

rough sketch accompanying our former report, which shows how the Bujuku derives its supplies from a much larger part of the snowy area than does the stream hitherto considered to be the upper course of the Mobuku. The Duke was not able to define so clearly the drainage on the side of the Semliki, but he says that the streams flowing west from the four main passes leading in that direction all unite to form the Butagu, the valley of which has been the usual line of approach to the snows on this side. In the Ice age the whole of the valleys of the Bujuku, Mobuku, and Mahoma (south of, and parallel to, the Mobuku) were filled with glaciers of the first order, which must have united and descended the Mobuku valley for some distance. Similarly, glaciers descending from the three southernmost of the groups must have united to form a great westward-flowing ice-stream. At present the lowest point reached by a glacier (that which feeds the Mobuku) is 13,682 feet. The permanent snows are included in a circle ten miles in diameter.

It should be mentioned that the Royal Geographical Society proposes to apply the Duke's name to the most southerly of the snowy *massifs*, instead of that of Thomson, who himself never saw Ruwenzori, important as his work was for the general opening up of this part of East Africa.

MAN AND SUPERMAN.

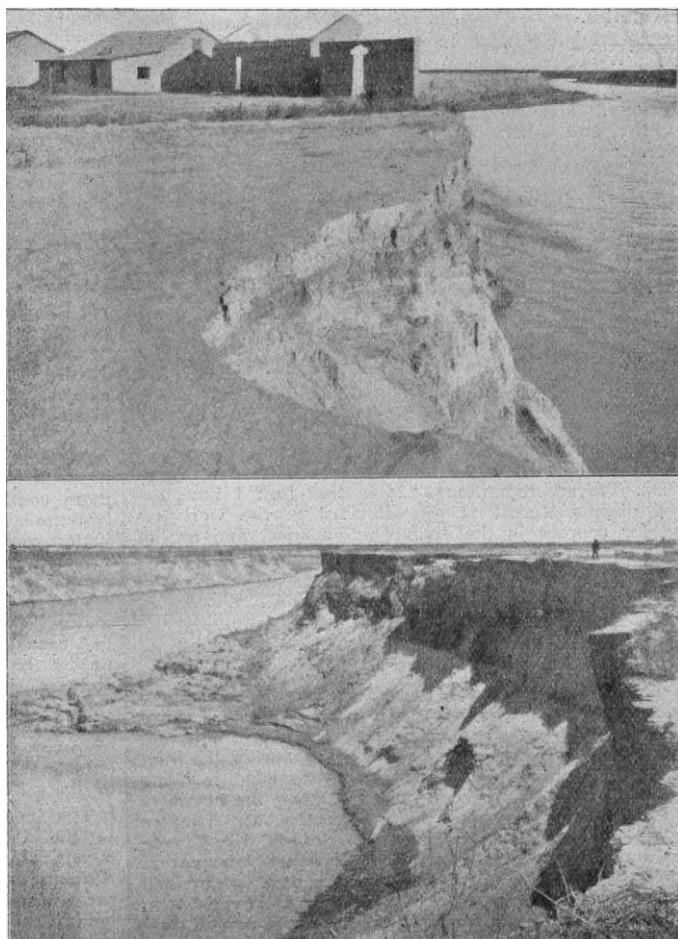
MR. ARTHUR J. DAVIS, of the U.S. Reclamation Service, describes in the *National Geographic Magazine* for January the startling changes that are now taking place in the region north of the Gulf of California. For 150 miles from the apex of the gulf, an area of delta and alluvium and old sea-bottom extends to the north-west between the mountains. The upper part of this basin forms the Imperial Valley, and lies in the territory of the United States. Below the Mexican frontier, the Colorado River, emerging from the hills, has built up a huge alluvial barrier above the level of the land to the north of it. This in its growth cut off the head of the ancient gulf, and led to the gradual disappearance of the water by evaporation.

The Imperial Valley thus came into existence, with part of its floor 300 feet below the level of the adjacent sea, and a variable lake without an outlet, the Salton Sink, at its northern end. From time to time the Colorado River, in seasons of flood, has diverted itself from the elevated delta into the Salton Sink, and the lake has grown in consequence. At other times it has banked itself out of this region, has flowed again into the Gulf of California, and has left its temporary northward-running channels, the Alamo and New Rivers, practically dry and sand-filled.

The ease with which the northern lowland could be irrigated led to the formation of a canal about seven years ago. Its mouth, however, became silted up, and a spot was then selected above a steeper slope, where the velocity of the water leaving the Colorado was greater and more effective. In May, 1905, however, the first serious flood-waters deepened this new channel, and supplied far more water northward than was required. The "Salton Sea" rose rapidly, and the Southern Pacific Railroad along its margin was equally rapidly moved to higher ground. Striking alterations occurred in the old valley-floors as they were invaded, and the cataract of the New River, cutting its way back to the frontier town of Calexico, flowed there in a channel 45 feet below the level of the

farm-lands. The peril became so great in 1906 that a huge dam was constructed on the delta, in order to compel the Colorado River to return to its former route into the Gulf of California. Mr. Davis's account of this titanic struggle—the printer makes him speak of "herculean efforts"—forms very interesting reading. The dam having been completed last November, it was estimated that the enlarged "Salton Sea" would dry up in about twelve years; but in December the water of the Colorado worked its way round the dam, and resumed its rush into the Imperial Valley.

The great cataract in the New River was in January eating its way backward, that is to say southward, at the rate of a mile in three days, with a width of some 1700 yards and a fall of 100 feet. The farms in the Imperial Valley are unable to avail themselves of the water so copiously



Upper figure.—Partial destruction of the town of Mexicala, Mexico, by the New River.
Lower figure.—The New River cutting into the farm-lands near Imperial, California, forming banks 70 feet in height, which are constantly falling in.

supplied, since it lies below their level; a great inland sea is arising, and dispossessing the railroad and the people whom it serves; and the probability of the diversion of the whole Colorado River northward threatens to deprive of water the settlers in Arizona and Mexico from the Grand Cañon down to the Gulf of California. It needs the philosophic spirit of a Lyell to regard physiographic changes of such magnitude with admiration rather than dismay.